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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,012	02/18/2002	Donald Thomas Robertson	A01185	5172
21898	7590	03/16/2004	EXAMINER	
ROHM AND HAAS COMPANY PATENT DEPARTMENT 100 INDEPENDENCE MALL WEST PHILADELPHIA, PA 19106-2399			BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/079,012

Applicant(s)

ROBERTSON, DONALD THOMA

Examiner

Melanie D. Bissett

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/02, 7/02.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 4-10 are rejected under 35 U.S.C. 102(e) as being anticipated by

Roberts et al.

3. Roberts discloses coating compositions having very low surface energies comprising carboxyl-group containing aqueous polyurethane dispersions (abstract).

The coating compositions comprise about 80-99.9% of a polyurethane dispersion, 0.1-10% of a photostabilizer, 0-10% of a surfactant, 0-5% of a crosslinker, 0-20% of a silicone fluid antifouling agent, and other additives (col. 8 lines 10-36). Because the polyurethane dispersions have solids contents of 3-60%, the coating compositions comprise ~2.4-60% by weight of the polyurethane polymer (col. 11 lines 61-64).

Because water-dispersible components including carboxyl-group containing monomers are incorporated into the polymer backbone, it is the examiner's position that the polymers would have at least two carboxylic acid groups (col. 18 line 63-col. 19 line 65).

Crosslinking agents are preferably added in an amount of 2-5% and may include oxazoline groups (col. 29 lines 20-37). The antifouling agents are used to prevent

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organisms from adhering to the surface; thus, they act as slip aids (col. 29 lines 52-61).

Note also that silicone fluids are used as antifouling agents, where the applicant has taught silicone materials as slip aids. Several siloxane surfactant compounds are noted for use as defoaming agents and as flow and leveling agents; thus, these materials would act as wetting agents for the coatings (col. 29 line 62-col. 30 line 19). The reference teaches the use of UV stabilizers as the photostabilizers in preferable amounts of 1-10% (col. 30 lines 24-36). Thus, it is the examiner's position that the coatings of the reference anticipate the above-noted claimed coatings.

4. Regarding the process, Roberts exemplifies allowing the coatings to dry and cure at room temperature. When organic solvents are used, Roberts teaches drying the films by applied heat and vacuum first (col. 29 lines 1-9). This would result in a process of drying the films and then allowing the films to cure.

5. Regarding the substrates, the coatings are noted as applicable to glass, metal, wood, and plastic substrates (col. 8 lines 46-50). Examples show the application to PTFE, a thermoplastic polyolefin (examples 7A-20A, 25A).

6. Regarding the claimed friction coefficient, Roberts has taught the claimed coating composition and has also taught that the coatings of the invention necessarily have low surface energies (col. 9 lines 36-47). Because the binder and additives used in Roberts' invention are the same types of binder and additives employed by the applicant, it is the examiner's position that the coatings of Roberts' invention would inherently possess the claimed friction coefficient.

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. in view of *Hawley's Condensed Chemical Dictionary*.

9. Regarding the matting agents, it is noted that matting or flatting agents are known for their art-recognized purpose of reducing gloss of coatings. See *Hawley's Condensed Chemical Dictionary*. Roberts teaches the use of pigments and dyes for altering appearance but does not specify the use of matting agents. It is the examiner's position that it would have been prima facie obvious to use a sufficient amount of a matting agent in the coatings of Roberts' invention to provide a desired appearance.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. in view of Göbel et al.

11. Roberts applies as above, teaching the incorporation of carboxyl groups into a polyurethane for facilitating the dispersion with water but failing to teach the acid numbers achieved. Göbel teaches that polyurethane materials having acid numbers of 5-50 are preferred for polyurethane dispersions, showing that high amounts of carboxylic acids render the mixture too viscous while low amounts of carboxylic acids do not provide the mixture sufficient stability in water (col. 6 lines 15-39). Thus, it would

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have been prima facie obvious to incorporate carboxylic acids into the polyurethane of Roberts' invention in an amount sufficient to stabilize the aqueous dispersion without rendering the coating too viscous to process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdb

  
James J. Seidleck  
Supervisory Patent Examiner  
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